

	<p align="center">Mining Form MR-500</p>	<p align="center">S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL BUREAU OF LAND AND WASTE MANAGEMENT DIVISION OF MINING AND SOLID WASTE MANAGEMENT 2600 Bull Street, Columbia, SC 29201 Telephone Number (803) 869-4261 Fax Number: (803) 896-4001</p>
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SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
BUREAU OF LAND AND WASTE MANAGEMENT
DIVISION OF MINING AND SOLID WASTE MANAGEMENT
2600 Bull Street; Columbia, SC 29201
Telephone Number (803) 896-4261 Fax Number (803) 896-4001

RECLAMATION PLAN
FORM MR-500 DATE VERSION ADOPTED: 7/1/94

As required in Section 48-20-90 of the South Carolina Mining Act, "An operator shall submit with his application for an operating permit a proposed reclamation plan. The reclamation plan for an operating permit only must be furnished to the local soil and water conservation district in which the mining operation is to be conducted. The plan must include as a minimum each of the elements specified in the definition of 'reclamation plan' in Section 48-20-40 and information required by the department. The reclamation plan must provide that reclamation activities, particularly those relating to control of erosion, to the extent feasible, must be conducted simultaneously with mining operations and be initiated at the earliest practicable time after completion or termination of mining on a segment of the permitted land. The plan must provide that reclamation activities must be completed within two years after completion or termination of mining on each segment of the area for which an operation permit is requested unless a longer period specifically is permitted by the department."

I. APPLICANT INFORMATION

1. Name of Company: Henry Farms, Inc.

2. Name of Proposed Mine: Henry Mine & Irrigation Pond County: Beaufort

3. Home Office Address: 64 Steady Gettin It Lane 843.838.2762
(Street **and** P.O. Box) (Telephone No.)

Frogmore SC 29920 843.838.5534
(City) (State) (Zip Code) (Fax. No.)

4. Local Office Address: 45 Tom Fripp Road 843.838.2762
(Street **and** P.O. Box) (Telephone No.)

Frogmore SC 29920 843.838.5534
(City) (State) (Zip Code) (Fax. No.)

5. Designate to which office Official Mail is to be sent:

Home Office: x Local Office:

6. Name of company personnel and their title to be the contact for official business and

correspondence: Craig Henry Cell -- 843.521.3826

II. ENVIRONMENTAL PROTECTION

1. Describe practices to protect adjacent resources such as roads, wildlife areas, woodland, cropland and others during mining and reclamation.

During mining, wildlife areas, woodlands, cropland and residences will be protect with a variety of methods. Protection of these resources can be achieved in part by observing setbacks to property lines, conducting concurrent reclamation as feasible, using accepted agronomic practices to establish temporary and permanent vegetation. What wildlife that may be in this small area may be temporarily displaced during mining; however, experience has shown once mining has ceased and reclamation completed new wildlife habitats are formed and populated by indigenous animal species.

2. Describe proposed methods to limit significant adverse effects on adjacent surface water and groundwater resources.

During mining all surface waters will be protected by complying with the NPDES permit requirements. Parameters are set to be protective of aquatic life in the receiving streams and human health and safety. Stormwater will be managed using best management practices and complying with SC DHEC's NPDES General Permit for Discharges Associated with Mineral Mining. Furthermore, Henry Farms will implement accepted soil and water conservation practices to stabilize disturbed soil. These practices include, at a minimum, proper soil preparation (e.g, grading, scarifying, fertilizing, etc.), seed selection, planting techniques and maintenance until vegetation is self sustaining. With the current plan, no water will enter Club Bridge Creek estuary.

Groundwater will be protected because mining will not use any chemicals; consequently, no potential for groundwater pollution from mining. The nearest residential area is 1, 400 feet distant from the mine site and mining will not adversely impact due to distance. The campground well, which Craig Henry owns and operates, withdraws potable groundwater from 100 feet deep. It has been the standard practice to drill all drinking water wells on St. Helena Island to a minimum 100 foot depth.

3. Describe proposed methods to limit significant adverse effects on known significant cultural or historic sites within the proposed permitted area.

Henry Farms does not believe the potential exists for significant cultural or historic resources to exist within the mine area. However, an archaeologist has been hired to conduct a Phase I investigation. The mine permit application will be updated once the report is finalized.

4. Describe method to prevent or eliminate conditions that could be hazardous to animal or fish life in or adjacent to the permitted area.

The reclamation of the pit will create an irrigation pond to be used in irrigating the crops. The shallow groundwater table will be the source of water for the pond and water quality is expected to be identical to the groundwater in the shallow aquifer and other existing ponds in the area.

5. Describe how applicant will comply with State air quality and water quality standards as established by the S.C. Department of Health and Environmental Control.

Proper reclamation practices will stabilize soils with vegetation to prevent wind erosion and dust during reclamation and afterwards. As per the revegetation plan, we plan to seed the pond banks with warm or cool season grass variety as necessary to rapidly stabilize the soil. Following establishment of the grasses, operator plans to plant myrtle bushes and nut bearing trees to attract wildlife.

III. RECLAMATION OF AFFECTED AREA

6. State useful purpose(s) the affected land is being proposed to be reclaimed to. More than one purpose may be checked, but information should be submitted to support the feasibility for each proposed purpose.

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|---------------------------------------|--|
| a. Lake or pond _____ x _____ | f. Grassland _____ x _____ |
| b. Agriculture <u>Irrigation Pond</u> | g. Recreation _____ |
| c. Woodlands _____ | h. Wetlands _____ |
| d. Residential _____ | i. Park _____ |
| e. Commercial _____ | j. Other <u>Pond for possible use for Irrigation in farming operations</u> |

Henry Farms reclamation of the area will increase wildlife habitat that will increase support for ducks, geese, ospreys and other wildlife in the area.

7. State the final maximum surface gradient(s) (slope) in soil, sand, or other unconsolidated materials on reclaimed land. Surface gradients steeper than 3H:1V (18 degrees or 33 percent) may be required to submit geotechnical data and studies to demonstrate that the steeper slopes will remain stable following final reclamation.

The surface gradient above the normal pool level of the pond will be a 3:1 slope. Below the normal pool level, the gradient will be a 1:1 slope.

8. How will the final slopes in unconsolidated material be accomplished? If the slope will be by backfilling, demonstrate that there is adequate material to accomplish the stated final gradient. If gradient is to be achieved by bring in material from outside the permitted area, state the nature of the material and approximate quantities. If the gradient is to be achieved by grading, show that there is adequate area for grading to achieve gradient (ie. adequate distance between the property line and edge of highwall). Operator should show calculations or other appropriate information to demonstrate that there is adequate materials in backfilling and grading to meet the requirements for final slope.

Final pit slopes will be graded as mining progresses. As mining is completed along a segment of the "final" pit wall, reclamation will begin by sloping, placement of topsoil and establishing vegetation.

9. Describe the plan for revegetation or other surface treatment of affected area(s). The revegetation plan shall include but not be limited to the following: (a) planned soil test; (b) site preparation and fertilization; (c) seed or plant selection; (d) rate of seeding or amount of planting per acre; (e) maintenance.

Henry Farms intends to seed centipede grass for the perennial vegetation. Rye grass will be overseeded to quickly stabilize the exposed soil and to provide a natural mulch until the centipede becomes established. Centipede will be planted at a rate of 10 – 11 lbs/1000 ft². Soil sampling will be conducted to determine fertilizer rate. Recommendations from Clemson Extension Service will also be solicited and considered. Once centipede becomes established myrtle bushes and nut trees will be planted for wildlife.

10. Provide, as a separate document, a closure plan of the mine and permitted facilities to prevent a release of contaminants from being harmful to the environment. A closure plan is not necessary for all mines, but is required where the possibility exist for (a) acid rock drainage; (b) where the National Pollutant Discharge Elimination Systems (NPDES) Permit have discharge limitation parameters other than pH and Total Suspended Solids (TSS); (c) chemically treated tailings or stockpiles (excludes fertilizer or lime for revegetation purposes).

Not applicable

- 11. Method of control of contaminants and disposal of mine waste soil, rock, mineral, scrap, tailings, slimes, and other material directly connected with the mining, cleaning, and preparation of mineral substances mined and includes all waste materials deposited on or in the permit area from any source.**

This is not applicable to this mining operation.

- 12. Method of reclaiming settling and/or sediment ponds.**

All sediment control will be managed by routing stormwater into pit to contain sediment. Consequently, there will be no sediment ponds to reclaim.

- 13. Describe method of restoration or establishment of stream channels, stream banks and site drainage to a condition minimizing erosion, siltation and other pollution.**

No streams or other water bodies will be impacted; consequently, this is not applicable.

- 14. What are the maintenance plans to insure that the reclamation practices established on the affected land will not deteriorate before released by the Department?**

Once mining is completed, pit dewatering will cease and groundwater will fill the pit over a period of several months to a year. Henry Farms will inspect reclamation practices to ensure revegetated pond banks are stable and vegetation thriving and self sustaining. Any erosion damage will be repaired and if necessary reseeded. The inspection and maintenance, as necessary, will continue until DHEC accepts reclamation and cancels mine permit in accordance with R.89-330.

- 15. For final reclamation, submit information about practices to provide for safety to persons and to adjoining property in all excavations. Identify areas of potential danger (vertical walls, unstable slopes, unstable surface on clay slimes, etc.) and provide appropriate safety provisions. These provisions can include but are not limited to setbacks, fencing, signs, benching, guardrails and boulders.**

All slopes above the pond level will be graded to 3:1 slopes to ensure slope stability and remove the danger of accidental falls. To prevent unintentional entry, a 47 inch cattle or woven wire fence will be maintained around the pond. "Keep Out" signs will be posted.

- 16. What provisions will be taken to prevent noxious, odious, or foul pools of water from collecting and remaining on the mined area? For mines to be reclaimed as lakes or ponds, provide supporting information that a minimum water depth of four (4) feet on at least fifty percent (50%) of the pond surface area can be maintained.**

The small area around the pond on final reclamation will be graded for positive drainage into the pond and revegetated. The pond will meet the criteria as stated above so not to become stagnant.

- 17. Identify any structures (e.g. buildings, roads) that are proposed to remain as part of final reclamation. Provide justification for leaving any structures.**

Not applicable

18. Attach two (2) copies of a map of the area (referred to as the RECLAMATION MAP) that shows the reclamation practices and conservation practices to be implemented. The following should be shown:

- A. The outline of the proposed final limits of the excavation, during the number of years for which the permit is requested.**
- B. The approximate final surface gradient(s) and contour(s) of the area to be reclaimed. This would include the sides and bottoms of mines reclaimed of ponds and lakes.**
- C. The outline of the tailings disposal area.**
- D. The outline of disposal areas for spoil and refuse (exclusive of tailings ponds).**
- E. The approximate location of the mean shore line of any impoundment or water body and inlet and/or outlet structures which will remain upon final reclamation.**
- F. The approximate locations of access roads, haul roads, ramps or buildings which will remain upon final reclamation.**
- G. The approximate locations of various vegetative treatments.**
- H. The proposed locations of re-established streams, ditches or drainage channels to provide for site drainage.**
- I. The proposed locations of diversions, terraces, silt fences, brush barriers or other Best Management Practices to be used for preventing or controlling erosion and off-site siltation.**
- J. Proposed locations of the measures to provide safety to persons and adjoining property.**
- K. Segments of the mine that can be mined and reclaimed as an ongoing basis.**
- L. The boundaries of the permitted area.**
- M. The boundaries of the affected area for the anticipated life of the mine.**
- N. The boundaries of the 100-year floodplain, where appropriate.**
- O. Identify sections of mine where the final surface gradient will be achieved by grading and/or backfilling.**
- P. A legend showing the name of the applicant, the name of the proposed mine, the north arrow, the county, the scale, the date of preparation and the name and title of the person who prepared the map.**

THE REQUIRED RECLAMATION MAP SHALL HAVE A NEAT, LEGIBLE APPEARANCE AND BE OF SUFFICIENT SCALE TO CLEARLY SHOW THE REQUIRED INFORMATION LISTED ABOVE. THE BASE FOR THE MAP SHALL BE EITHER A SPECIALLY PREPARED LINE DRAWING, AERIAL PHOTOGRAPH, ENLARGED USGS TOPOGRAPHIC MAP OR A RECENTLY PREPARED PLAT. RECLAMATION MAP SHOULD BE THE SAME SCALE USED FOR THE SITE MAP.

IV. SCHEDULE FOR IMPLEMENTATION OF CONSERVATION AND RECLAMATION PRACTICES

- 19. As stated in Section 48-20-90 of the S.C. Mining Act, reclamation activities, to the extent feasible, must be conducted simultaneously with mining operations. Identify which areas or segments of the mine are not feasible to reclaim simultaneously with mining. Provide reasons why reclamation can not proceed simultaneously with mining in these areas.**

Mine/pond site is presently active and will expand into Phase 3 upon the issuance of this Individual Mine Permit. During periods of inactivity, temporary seeding of appropriate grasses will be performed to stabilize disturbed soil. Where feasible to concurrent reclaim site is through sloping and revegetating final pit walls.

20. Section 48-20-40(16)(l) of the S.C. Mining Act requires a, "time schedule, including the anticipated years for completion of reclamation by segments". This time schedule should meet the requirements of Section 48-20-90 of the Mining Act.

SCHEDULE FOR IMPLEMENTING CONSERVATION AND RECLAMATION PRACTICES

Conservation & Reclamation Practices	Segment or Area	Planned		*Applied		Notes
		Amount	Year	Amount	Month/Year	
Locate and Mark two Survey Points	Permit Area	2	2011			Start of Construction
Locate and mark boundary of area to be affected by mining	Phase 1	1,100 ft	2011			Along length of area to be affected by mining.
Strip and stockpile topsoil along affected area boundary	Phase 1	5.0 ac.				During mining Originally mined under GP permit
Slope highwall to final gradients along outside final pit highwall	Phase 1	As feasible	As feasible			Concurrent Reclamation during mining
Place topsoil, fertilize as needed, and reseed sloped highwall	Phase 1	As feasible	As feasible			Concurrent Reclamation during mining
Locate and mark boundary of area to be affected by mining	Phase 2	1,500 ft	2015			Along length of area to be affected by mining.
Strip and stockpile topsoil along affected area boundary	Phase 2	4.8 ac.				During mining
Slope highwall to final gradients along outside final pit highwall	Phase 2	As feasible	As feasible			Concurrent Reclamation during mining
Place topsoil, fertilize as needed, and reseed sloped highwall	Phase 2	As feasible	As feasible			Concurrent Reclamation during mining
Locate and mark boundary of area to be affected by mining	Phase 3	900 ft	2018			Along length of area to be affected by mining.
Strip and stockpile topsoil along affected area boundary	Phase 3	2.8 ac.				During mining
Slope highwall to final gradients along outside final pit highwall	Phase 3	As feasible	As feasible			Concurrent Reclamation during mining
Place topsoil, fertilize as needed, and reseed sloped highwall	Phase 3	As feasible	As feasible			Concurrent Reclamation during mining
Cease pit dewatering to allow pit to fill with water	Entire Affected Area	12.6 ac.	End of Mining			
Monitor and maintain reclamation until released by DHEC.			2021			Expected completion of mining and reclamation for entire mine.
Access Road – plan to keep access road open for use in farming operations	Access road to public road	3.0				After mining is completed
AA – Affected Area BMPs – Best Management Practices Fert. – Fertilize LOM – Life of Mine MW - Monitoring Well PA – Permitted Area PL – Property Line SB – Sediment Basin ST – Sediment Traps SW – Stormwater TS – Topsoil WL – Wetlands						

* Completed by the Department
DHEC 3111 (08/1997)

YOU ARE NOTIFIED THAT:

- 1) you, the operator, must file an application to modify the reclamation plan in the event actual reclamation varies from the set forth hereinabove, and
- 2) if at any time it appears to the Department that the activities under the reclamation plan are failing to achieve the purposes and requirements of the S.C. Mining Act, the Department may modify the RECLAMATION PLAN in accordance to Section 48-20-150.

Signature of Applicant/Operator or his Authorized Representative

Printed Name of Applicant/Operator or his Authorized Representative

Title

Date

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Department Use Only

Permit No. _____ Date Application Approved _____ Date Bond Rec'd _____

Bond Amount _____ Blanket or Single Bond Permit Issuance Date _____

ACTION TAKEN ON THIS RECLAMATION PLAN

_____ Approved _____ Denied _____ Approved with Additional Terms and Conditions

By: _____
DIVISION DIRECTOR

Date: _____